

**NEW SOURCE CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR MANAGEMENT  
and  
ST. JOSEPH COUNTY HEALTH DEPARTMENT**

**John's Patterns & Glass Inc.  
1802 West 6<sup>th</sup> Street  
Mishawaka, Indiana 46544**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1 if new source, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 141-10775-00187	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and St. Joseph County Health Department. The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary manufacturing plant for fiberglass motor vehicle parts and accessories.

Authorized Individual: John Lentner  
Source Address: 1802 West 6<sup>th</sup> Street, Mishawaka, Indiana 46544  
Mailing Address: 1802 West 6<sup>th</sup> Street, Mishawaka, Indiana 46544  
Phone Number: (219) 255-4367  
SIC Code: 3714  
County Location: St. Joseph  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Eight (8) forced air furnaces, identified as C-F, C-R, C-B, B-F, B-R, D1, D2, and D3, each with a maximum heat input rate of 0.175, 0.150, 0.180, 0.310, 0.300, 0.175, 0.175, and 0.175 million British thermal units (MMBtu) per hour, respectively, each combusting natural gas, each exhausting through one (1) stack ID# C-Front, C-Rear, C-Boiler, B-Front, B-Rear, D-1, D-2, and D-3, respectively;
- (b) One (1) gelcoat booth with gelcoat system, identified as GB-1, utilizing spray gelcoat application methods, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# GB-1;
- (c) One (1) lamination area with chopper system, identified as BB-1, utilizing resin coat application, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# BB-1; and
- (d) One (1) grind and trim area, identified as GT-1, utilizing a dry filter for particulate matter control, exhausting through one (1) stack ID# GT-1.

## **SECTION B GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1 Permit No Defense [IC 13]**

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2 Definitions**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3 Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5 Modification to Permit [326 IAC 2]**

Notwithstanding Condition B.6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6 Minor Source Operating Permit [326 IAC 2-6.1]**

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, St. Joseph County Health Department, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

**B.7 Local Agency Requirement**

That an application for an operation permit must be made ninety (90) days before start up to:

St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

The operation permit issued by St. Joseph County Health Department shall contain as a minimum the conditions in the Operation Conditions section of this permit.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source
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**C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]**

The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

**C.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, St. Joseph County Health Department upon request and shall be subject to review and approval by IDEM, OAM, and St. Joseph County Health Department.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

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- (a) The Permittee must comply with the requirements of [326 IAC 2-6.1-6] whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, St. Joseph County Health Department, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
  - (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
  - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
  - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, and St. Joseph County Health Department or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, and St. Joseph County Health Department nor an authorized representative, may disclose the information unless and until IDEM, OAM, and St. Joseph County

Health Department makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAM, and St. Joseph County Health Department acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]**  
Pursuant to [326 IAC 2-6.1-6(d)(3)] :

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- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, and St. Joseph County Health Department, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, and St. Joseph County Health Department shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.6 Permit Revocation [326 IAC 2-1-9]**

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Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, St. Joseph County Health Department, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

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Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements**

**C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM, St. Joseph County Health Department within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**Compliance Monitoring Requirements**

**C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and



St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, and St. Joseph County Health Department upon request and shall be subject to review and approval by IDEM, OAM, and St. Joseph County Health Department. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.13 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## Record Keeping and Reporting Requirements

### C.14 Annual Emission Statement [326 IAC 2-6]

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- and
- St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and St. Joseph County Health Department on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and St. Joseph County Health Department may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, and St. Joseph County Health Department representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or St. Joseph County Health Department makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or St. Joseph County Health Department within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures.

Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
Room 914  
County-City Building  
South Bend, IN 46601-1870

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and St. Joseph County Health Department on or before the date it is due.

- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) A malfunction as described in 326 IAC 1-6-2; or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions unit Description

- (a) Eight (8) forced air furnaces, identified as C-F, C-R, C-B, B-F, B-R, D1, D2, and D3, each with a maximum heat input rate of 0.175, 0.150, 0.180, 0.310, 0.300, 0.175, 0.175, and 0.175 million British thermal units (MMBtu) per hour, respectively, each combusting natural gas, each exhausting through one (1) stack ID# C-Front, C-Rear, C-Boiler, B-Front, B-Rear, D-1, D-2, and D-3, respectively;
- (b) One (1) gelcoat booth with gelcoat system, identified as GB-1, utilizing spray gelcoat application methods, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# GB-1;
- (c) One (1) lamination area with chopper system, identified as BB-1, utilizing resin coat application, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# BB-1; and
- (d) One (1) grind and trim area, identified as GT-1, utilizing a dry filter for particulate matter control, exhausting through one (1) stack ID# GT-1.

## Emission Limitations and Standards

### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The amount of VOC delivered to the applicators of the gelcoat booth and lamination area shall be less than 25 tons per year. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply. Any change or modification, from the gelcoat booth and lamination area that would increase in potential VOC emissions to more than 25.0 tons per year, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1.1 before such change can occur.

### D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

The amount of single and total HAPs delivered to the applicator of the gelcoat booth and lamination area shall be limited to less than 10 and 25 tons per year, respectively. Therefore, the maximum achievable control technology (MACT) requirement in 326 IAC 2-4.1-1 (New Source Toxics Control) does not apply. Any change or modification, from the gelcoat booth and lamination area that would increase in source wide single and total HAP emissions to more than 10 and 25 tons per year, respectively, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1 before such change can occur.

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**D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the grind and trim area (GT-1) shall not exceed 0.72 pounds per hour when operating at a process weight rate of 150 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) The PM from the gelcoat booth (GB-1) and lamination area (BB-1) shall not exceed the pound per hour emission rate established as E in the following formula:  
Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

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**D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

**Compliance Determination Requirements**

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**D.1.5 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM or St. Joseph County Health Department, compliance with the VOC limit specified in Condition D.1.1, the single and total HAP limits in Condition D.1.2, and the PM limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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**D.1.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using new emissions information made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors shall be taken from the following reference approved by IDEM, OAM and St. Joseph County Health Department: "CFA Emission Models for the Reinforced Plastics Industries," Composites Fabricators Association, February 28, 1998, or its update.

**Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

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**D.1.7 Particulate Matter (PM)**

The dry filters for PM control shall be in operation at all times when the gelcoat booth (GB-1) and lamination area (BB-1) are in operation.

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**D.1.8 Monitoring**

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the gelcoat booth and lamination area stacks (GB-1 and BB-1) while one or more of the booths are in operation.

The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

##### **D.1.9 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2.
  - (1) The amount and VOC/HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC/HAP usage for each month; and
  - (5) The weight of VOCs/HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



**Indiana Department of Environmental Management  
Office of Air Management  
and  
St. Joseph County Health Department**

**Technical Support Document (TSD) for a New Source Construction and  
Minor Source Operating Permit**

**Source Background and Description**

**Source Name:** John's Patterns & Glass Inc.  
**Source Location:** 1802 West 6<sup>th</sup> Street, Mishawaka, Indiana 46544  
**County:** St. Joseph  
**SIC Code:** 3714  
**Operation Permit No.:** 141-10775-00187  
**Permit Reviewer:** Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed an application from John's Patterns & Glass Inc. relating to the construction and operation of a fiberglass motor vehicle parts and accessories manufacturing plant.

**New Emission Units and Pollution Control Equipment**

The application includes information relating to the construction and operation of the following equipment:

- (a) Eight (8) forced air furnaces, identified as C-F, C-R, C-B, B-F, B-R, D1, D2, and D3, each with a maximum heat input rate of 0.175, 0.150, 0.180, 0.310, 0.300, 0.175, 0.175, and 0.175 million British thermal units (MMBtu) per hour, respectively, each combusting natural gas, each exhausting through one (1) stack ID# C-Front, C-Rear, C-Boiler, B-Front, B-Rear, D-1, D-2, and D-3, respectively;
- (b) One (1) gelcoat booth with gelcoat system, identified as GB-1, utilizing spray gelcoat application methods, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# GB-1;
- (c) One (1) lamination area with chopper system, identified as BB-1, utilizing resin coat application, with a dry filter, for particulate matter control, exhausting through one (1) stack ID# BB-1; and
- (d) One (1) grind and trim area, identified as GT-1, utilizing a dry filter for particulate matter control, exhausting through one (1) stack ID# GT-1.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
B-Front	forced air furnace	3	0.67	152	ambient
B-Rear	forced air furnace	3	0.67	150	ambient
C-Front	forced air furnace	4	0.67	75	ambient
C-Rear	forced air furnace	10	0.67	70	ambient
C-Boiler	forced air furnace	17	0.67	78	ambient
D-1	forced air furnace	4	0.67	75	ambient
D-2	forced air furnace	7	0.67	75	ambient
D-3	forced air furnace	7	0.67	75	ambient
GB-1	Gelcoat Booth	10	2.0	22,661	ambient
BB-1	Lamination Area	10	2.0	7,600	ambient
GT-1	Grind & Trim Area	20	2.0	7,600	ambient

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on March 18, 1999, with additional information received on April 19, 1999 and May 4, 1999.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (four (4) pages).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	40.62
PM-10	40.62
SO <sub>2</sub>	0.00
VOC	13.42
CO	0.60
NO <sub>x</sub>	0.72

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Styrene	less than 10
TOTAL	less than 25

- (a) Potential to emit (as defined in the Indiana Rule) of PM-10 is greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Gelcoat Booth (GB-1)	0.08	0.08	0.00	4.22	0.00	0.00	4.22
Lamination Area (BB-1)	0.66	0.66	0.00	9.16	0.00	0.00	9.16
Grind & Trim Area (GT-1)	3.15	3.15	0.00	0.00	0.00	0.00	0.00
Eight Furnaces	0.01	0.05	0.00	0.04	0.60	0.72	0.00
Total Emissions	3.90	3.94	0.00	13.42	0.60	0.72	13.38

### Actual Emissions

No previous emission data has been received from the source.

### County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) St. Joseph County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

## Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	1.19
PM10	1.23
SO <sub>2</sub>	0.00
VOC	13.42
CO	0.60
NO <sub>x</sub>	0.72
Single HAP	9.16
Combination HAPs	13.38

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

## Part 70 Permit Determination

### 326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

## Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

## State Rule Applicability - Entire Source

### 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) and 40 CFR 52.21

This source is not subject to the requirements of 326 IAC 2-2 (PSD), because the source is not one of the 28 listed source categories and the potential to emit for all regulated pollutants are less than 250 tons per year.

### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of PM-10 and VOC and is located in St. Joseph County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

**326 IAC 5-1 (Visible Emissions Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

**326 IAC 2-4.1-1 (New Source Toxics Control)**

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) of 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The gelcoat booth (GB-1) and the lamination area (BB-1) are not subject to the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control), because the gelcoat booth (GB-1) and the lamination area (BB-1) have potential to emit of single and total HAPs of less than 10 and 25 tons per year, respectively.

**326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)**

The eight (8) forced air furnaces are not subject to the requirements of 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating). The eight (8) forced air furnaces are not sources of indirect heating.

**326 IAC 6-3-2 (Process Operations)**

- (a) The particulate matter (PM) from the grinding and trim area (GT-1) shall not exceed 0.72 pounds per hour, based on a total process weight rate of 150 pounds per hour. This is based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10(0.075^{0.67}) = 0.72 \text{ lbs/hr}$$

Based on this calculation, the potential PM emissions of 0.1 lbs/hr are less than the allowable emissions of 0.72 lbs/hr, therefore, grinding and trim area comply with this rule.

- (b) The particulate matter (PM) overspray from the gelcoat booth (GB-1) and lamination area (BB-1) shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

Facilities existing as of January 1, 1980 and have potential VOC emissions of 25 tons per year or more and are not subject to any other 8 rules shall reduce VOC emissions using Best Available Control Technology (BACT). The gelcoat booth (GB-1) and the lamination area (BB-1) are not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the gelcoat booth (GB-1) and the lamination area (BB-1) have potential to emit of VOC of less than 25 tons per year.

## Compliance Requirements

Permits issued under 326 IAC 2-6 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-6.1-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The gelcoat booth (GB-1) and the lamination area (BB-1) have applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the gelcoat booth and the lamination area stacks (GB-1 and BB-1) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the dry filter for the gelcoat booth (GB-1) and the lamination area (BB-1) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-6 (Minor Source Operating Permit).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (Pages 2 and 4 of 4 of Appendix A in TSD).

### **Conclusion**

The construction and operation of a stationary manufacturing plant for fiberglass motor vehicle parts and accessories shall be subject to the conditions of the attached proposed **New Source Construction and Minor Source Operating Permit 141-10775-00187**.

## **Indiana Department of Environmental Management Office of Air Management**

### **Addendum to the Technical Support Document for New Construction and Minor Source Operating Permit**

Source Name: John's Patterns & Glass, Inc.  
Source Location: 1802 West 6<sup>th</sup> Street, Mishawaka, Indiana 46544  
County: St. Joseph  
Operation Permit No.: 141-10775-00187  
SIC Code: 3714  
Permit Reviewer: Yvette de los Angeles/EVP

On May 28, 1999, the Office of Air Management (OAM) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that John's Patterns & Glass, Inc. had applied for a construction permit to construct and operate a fiberglass motor vehicle parts and accessories manufacturing plant. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following changes to the New Construction and Minor Source Operating Permit (changes in bold or strikeout for emphasis):

#### **Comment 1**

On Page 6 of 7 of the Technical Support Document (TSD), in the Compliance Requirements, daily visible emission notations of the gelcoat booth and lamination area stacks are required. I believe the inclusion of this condition is a mistake, since this condition is not included in the Compliance Monitoring Requirements of the actual MSOP. The MSOP has a requirement for daily inspections of the placement, integrity and particle loading of the filters (along with various other weekly and monthly inspections).

#### **Response 1**

Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Page 6 of 7 of the Technical Support Document (Compliance Requirements) has been revised as follows:

#### **Compliance Requirements**

The compliance monitoring requirements applicable to this source are as follows:

1. The gelcoat booth (GB-1) and the lamination area (BB-1) have applicable compliance monitoring conditions as specified below:



- (a) ~~Daily visible emissions notations of the gelcoat booth and the lamination area stacks (GB-1 and BB-1) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.~~
- (a) **Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the gelcoat booth and lamination area stacks (GB-1 and BB-1) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**
- (b) **Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**
- (c) **Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.**

These monitoring conditions are necessary because the dry filter for the gelcoat booth (GB-1) and the lamination area (BB-1) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-6 (Minor Source Operating Permit).

Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations

Page 1 of 4 TSD App A

Company Name: John's Patterns & Glass Inc.  
Address City IN Zip: 1802 West 6th Street, Mishawaka, IN 46544  
CP: 141-10775  
Plt ID: 141-00187  
Reviewer: Yvette de los Angeles/EVP  
Date: 08/14/99

Uncontrolled Potential Emissions:																	
Material	Density (Lb/Gal)	Weight % Styrene Monomer/Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	* Emission Factor % (RW)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Gel (GB-1)	11.4	31.60%	2.0%	29.6%	2.0%	69.00%	9.60%	0.88000	1.000	3.44	3.37	0.96	23.11	4.22	7.51	NA	75%
Resin (BB-1)	9.1	33.50%	2.0%	31.5%	2.0%	67.30%	4.60%	5.00000	1.000	2.92	2.86	2.09	50.18	9.16	33.10	NA	75%
Controlled Potential Emissions:																	
<b>Total Controlled Potential Emissions (GB-1):</b> <b>Total Controlled Potential Emissions (BB-1):</b>										Control Efficiency	Control Efficiency	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr		
										VOC	PM						
										0.00%	99.00%	0.96	23.11	4.22	0.08		
										0.00%	98.00%	2.09	50.18	9.16	0.66		

\* Emission Factor from the EPA's CFA Emission Models, entitled "CFA Emission Models for the Reinforced Plastic Industries", February 28, 1998.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

**Appendix A: Emission Calculations**  
**HAP Emission Calculations**

Page 2 of 4 TSD AppA

**Company Name: John's Patterns & Glass Inc.**  
**Address City IN Zip: 1802 West 6th Street, Mishawaka, IN 46544**  
**CP: 141-10775**  
**Pit ID: 141-00187**  
**Reviewer: Yvette de los Angeles/EVP**  
**Date: 08/14/99**

Uncontrolled Potential Emissions:						
Component	Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	* Emission Factor (%) RW	Styrene Emissions (ton/yr)
RV and Industrial Parts	Resin (BB-1)	9.09	5.00	1.00	4.60%	<b>9.16</b>
RV and Industrial Parts	Gel (GB-1)	11.40	0.88	1.00	9.60%	<b>4.22</b>

\* Emission Factor from the EPA's CFA Emission Models, entitled "CFA Emission Models for the Reinforced Plastic Industries", February 28, 1998.

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Eight (8) Forced Air Furnaces**

Page 3 of 4 TSD App A

**Company Name:** John's Patterns & Glass Inc.  
**Address City IN Zip:** 1802 West 6th Street, Mishawaka, IN 46544  
**CP:** 141-10775  
**Plt ID:** 141-00187  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 08/14/99

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.6

14.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.01	0.05	0.00	0.72	0.04	0.60

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Eight (8) Forced Air Furnaces**  
**HAPs Emissions**

Page 4 of 4 TSD App A

**Company Name: John's Patterns & Glass Inc.**  
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HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.508E-05	8.620E-06	5.387E-04	1.293E-02	2.442E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.592E-06	7.902E-06	1.006E-05	2.730E-06	1.508E-05

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.